```
entry:
  call void @llvm.dbg.value(metadata ptr %a, metadata !49, metadata
  ... !DIExpression()), !dbg !62
  call void @llvm.dbg.value(metadata ptr %b, metadata !50, metadata
  ... !DIExpression()), !dbg !62
  call void @llvm.dbg.value(metadata ptr %c, metadata !51, metadata
  ... !DIExpression()), !dbg !62
  call void @llvm.dbg.value(metadata ptr %cond, metadata !52, metadata
  ... !DIExpression()), !dbg !62
  call void @llvm.dbg.value(metadata i32 %n, metadata !53, metadata
  ... !DIExpression()), !dbg !62
  %call = tail call double @getTimeMiliSeconds(), !dbg !63
  call void @llvm.dbg.value(metadata double %call, metadata !55, metadata
  ... !DIExpression()), !dbg !62
  %0 = load i32, ptr @EventSet, align 4, !dbg !64, !tbaa !66
  %call1 = tail call i32 @PAPI_start(i32 noundef %0) #10, !dbg !70
  call void @llvm.dbg.value(metadata i32 %call1, metadata !54, metadata
  ... !DIExpression()), !dbg !62
  %cmp.not = icmp eq i32 %call1, 0, !dbg !71
  br i1 %cmp.not, label %for.cond.preheader, label %if.then, !dbg !72
                              T              |              F
```

```
for.cond.preheader:
  %cmp566 = icmp sgt i32 %n, 0
  call void @llvm.dbg.value(metadata i32 0, metadata !56, metadata
  ... !DIExpression()), !dbg !73
  br i1 %cmp566, label %for.cond4.preheader.us.preheader, label
  ... %for.cond.cleanup, !dbg !74
                    T              |              F
```

```
if.then:
  %5 = load ptr, ptr @stderr, align 8, !dbg !112, !tbaa !114
  %call2 = tail call i32 (ptr, ptr, ...) @fprintf(ptr noundef %5, ptr noundef
  ... nonnull @.str, i32 noundef %call1, ptr noundef nonnull @.str.1, i32 noundef
  ... 66) #11, !dbg !112
  tail call void @exit(i32 noundef %call1) #12, !dbg !112
  unreachable, !dbg !112
```

```
for.cond4.preheader.us.preheader:
  %wide.trip.count = zext i32 %n to i64
  br label %for.cond4.preheader.us, !dbg !75
```

```
for.cond4.preheader.us:
  %j.068.us = phi i32 [ %inc35.us, %for.cond4.for.cond.cleanup6_crit_edge.us
  ... ], [ 0, %for.cond4.preheader.us.preheader ]
  call void @llvm.dbg.value(metadata i32 %j.068.us, metadata !56, metadata
  ... !DIExpression()), !dbg !73
  call void @llvm.dbg.value(metadata i32 0, metadata !58, metadata
  ... !DIExpression()), !dbg !76
  br label %for.body7.us, !dbg !74
```

```
for.body7.us:
  %indvars.iv = phi i64 [ 0, %for.cond4.preheader.us ], [ %indvars.iv.next,
  ... %for.inc.us ]
  call void @llvm.dbg.value(metadata i64 %indvars.iv, metadata !58, metadata
  ... !DIExpression()), !dbg !76
  %arrayidx.us = getelementptr inbounds i8, ptr %cond, i64 %indvars.iv, !dbg
  ... !77
  %1 = load i8, ptr %arrayidx.us, align 1, !dbg !77, !tbaa !81, !range !83
  %tobool.not.us = icmp eq i8 %1, 0, !dbg !77
  br i1 %tobool.not.us, label %for.inc.us, label %if.then8.us, !dbg !84
                    T              |              F
```

```
if.then8.us:
  %arrayidx10.us = getelementptr inbounds i32, ptr %c, i64 %indvars.iv, !dbg
  ... !85
  %2 = load i32, ptr %arrayidx10.us, align 4, !dbg !85, !tbaa !66
  %add.us = add nsw i32 %2, 4, !dbg !87
  %arrayidx12.us = getelementptr inbounds i32, ptr %a, i64 %indvars.iv, !dbg
  ... !88
  store i32 %add.us, ptr %arrayidx12.us, align 4, !dbg !89, !tbaa !66
  %arrayidx14.us = getelementptr inbounds i32, ptr %b, i64 %indvars.iv, !dbg
  ... !90
  %3 = load i32, ptr %arrayidx14.us, align 4, !dbg !90, !tbaa !66
  %cmp17.us = icmp slt i32 %3, %add.us, !dbg !92
  br i1 %cmp17.us, label %if.then18.us, label %if.end25.us, !dbg !93
                    T              |              F
```

```
if.then18.us:
  %mul.us = mul nsw i32 %add.us, %2, !dbg !94
  store i32 %mul.us, ptr %arrayidx14.us, align 4, !dbg !96, !tbaa !66
  br label %if.end25.us, !dbg !97
```

```
if.end25.us:
  %4 = phi i32 [ %mul.us, %if.then18.us ], [ %3, %if.then8.us ], !dbg !98
  %add30.us = add nsw i32 %4, %add.us, !dbg !99
  store i32 %add30.us, ptr %arrayidx10.us, align 4, !dbg !100, !tbaa !66
  br label %for.inc.us, !dbg !101
```

```
for.inc.us:
  %indvars.iv.next = add nuw nsw i64 %indvars.iv, 1, !dbg !102
  call void @llvm.dbg.value(metadata i64 %indvars.iv.next, metadata !58,
  ... metadata !DIExpression()), !dbg !76
  %exitcond.not = icmp eq i64 %indvars.iv.next, %wide.trip.count, !dbg !103
  br i1 %exitcond.not, label %for.cond4.for.cond.cleanup6_crit_edge.us, label
  ... %for.body7.us, !dbg !74, !llvm.loop !104
                    T              |              F
```

```
for.cond4.for.cond.cleanup6_crit_edge.us:
  %inc35.us = add nuw nsw i32 %j.068.us, 1, !dbg !108
  call void @llvm.dbg.value(metadata i32 %inc35.us, metadata !56, metadata
  ... !DIExpression()), !dbg !73
  %exitcond71.not = icmp eq i32 %inc35.us, 10, !dbg !109
  br i1 %exitcond71.not, label %for.cond.cleanup, label
  ... %for.cond4.preheader.us, !dbg !75, !llvm.loop !110
                    T              |              F
```

```
for.cond.cleanup:
  %6 = load i32, ptr @EventSet, align 4, !dbg !116, !tbaa !66
  %call37 = tail call i32 @PAPI_stop(i32 noundef %6, ptr noundef nonnull
  ... @CounterValues) #10, !dbg !118
  call void @llvm.dbg.value(metadata i32 %call37, metadata !54, metadata
  ... !DIExpression()), !dbg !62
  %cmp38.not = icmp eq i32 %call37, 0, !dbg !119
  br i1 %cmp38.not, label %if.end41, label %if.then39, !dbg !120
                    T              |              F
```

```
if.end41:
  %call42 = tail call double @getTimeMiliSeconds(), !dbg !123
  %sub = fsub double %call42, %call, !dbg !124
  store double %sub, ptr @ExecutionTime, align 8, !dbg !125, !tbaa !126
  ret void, !dbg !128
```

```
if.then39:
  %7 = load ptr, ptr @stderr, align 8, !dbg !121, !tbaa !114
  %call40 = tail call i32 (ptr, ptr, ...) @fprintf(ptr noundef %7, ptr noundef
  ... nonnull @.str, i32 noundef %call37, ptr noundef nonnull @.str.1, i32 noundef
  ... 81) #11, !dbg !121
  tail call void @exit(i32 noundef %call37) #12, !dbg !121
  unreachable, !dbg !121
```

CFG for 'nested_if_case_1' function